

POLISH PRODUCTION OF STRAIN S-19 AND TUBERCULIN

VACCINE S-19 USED FOR BRUCELLOSIS -- Lublin, Medycyna Weterynaryjna, Vol VII, No 6, Jun 51

Strain S-19, produced in Poland by the PIJ (Panstwowy Instytut Weterynaryjny, State Veterinary Institute) in Pulavy, has been tested by the Zaklad Chorob Bydla (Research Laboratory for Cattle Diseases) of the PIW, by the Division of Animal Breeding and Hygienc of the PIW, and by the veterinary inspectors of FGR (Panstwove Gospodarstva Rolne, State Farms). These three groups carried out S-19 inoculations on a large scale in the period 1948 - 1950 to test the prophylactic value of the vaccine and to determine whether healthy animals became infected on contact with inoculated animals and whether persons became infected with brucellosis through the use of the vaccine S-19.

All groups maintained that the results obtained from the inoculation were favorable. Domanski and Jaskowski stated that heigers inoculated at the age of 6-10 months and then taken into an infected cow barn did not abort. Wedrychowicz, who inoculated 5,261 cows, stated that the results of the inoculation were satisfactory. There is no darger that healthy animals will become infected through contact with inoculated animals, or that persons will become ill through the use of S-19.

A constant battle must be waged with brucellosis because of the economic losses it causes and the danger of people becoming infected.

At present, the following measures to overcome this disease are being taken:

- Diagnosis of the disease through serological or bacteriological tests on samples of blood, milk, semen, afterbirth, or aborted fecus.
- 2. Destruction of Bang's bacilli through proper cleaning and disinfection of cow barns and equipment, and disinfection of water seeping from dung piles, manure, and of pastures and stagmant waters (ponds, pools, puddles, and ditches) which have been used by animals infected with brucellosis.

	CLASSIFICATION	RESTRICTED	FUR OFFICIAL	USE ONLY
STATE X NAVY	NSRB	DISTRIBUTION		
ARMY X AIR	X FBI			

- 1 -

. [



- 3. Vaccination of healthy animals susceptible to infection.
- 4. A strict isolation of infected animals from healthy animals.

Even though these measures for overcoming brucellosis are not as yet properly applied everywhere, the following table shows the positive results obtained by the PGR in their application of these measures:

Year	No of Head of Cattle Tested for Brucellosis	No of Animals Reacting Positively to Serological Tests	Incidence (%)
1948	41,764	9,543	22.85
1949	52,524	9,781	18.62
1950	85.126		10.05
	0),120	10,971	12.88

POLISH PRODUCTION OF TUBERCULIN -- Lublin, Medycyna Weterynaryjna, Vol VII, No 4, Apr 51

Koch's old tuberculin is produced in the PIW (Panstwowy Instytut Weterynaryjny, State Veterinary Institute). Tuberculin made in Poland is polyvalent. For its production, five strains of human tuberculosis, of which the Vellee strain is the most satisfactory, and one strain of bovine tuberculosis, obtained from the Pasteur Institute, are used.

A third of the flat-bottomed flasks are used to produce the bovine strain, and two thirds for the human type strain. For the cultivation of the human type, the culture medium used is 5-percent calf's gelatin bouillon with one percent of reptone and 0.5 percent of sodium chloride with a pH of 7.2. For the bovine type, the culture medium is 3 percent calf's gelatin bouillon with one percent of peptone and 0.5 percent of sodium chloride with a pH of 7.2.

Strains used in the production are preserved in the parent culture medium in 300-cubic-centimeter Erlenmayer ilasks. The original strain grows in the parent flasks 8-10 days, and is then transplanted into 1- to 3-liter Ferenbach production flasks. These flasks are kept in an incubator at a temperature of 37.5° centigrade for 8 hours. The culture is then killed by raising the temperature to 100° centigrade for one hour. It is then filtered and kept at a temperature of 85° until it thickens to one tenth of its original volume. The tuberculin is left for 3 months to ripen, and any precipitated protein is then filtered out by means of a K filter (paper with asbestos).

To keep the protein at a minimum, Sauton's synthetic culture is being tried for the production of tuberculin. The composition of Sauton's synthetic culture medium is: asparagine 4.0, citric acid 2.0, potassium viosphate II as a base 0.5, magnesium sulfate 0.5, ammonium-iron citrate 0.05, glycerin 60.0, and distilled water 940.0 Its effectiveness has not yet been tosted. -- Dr S. Ustupska

STAT



- E N D -